

Grenada Manufacturing

Data Review

GRENADA, MISSISSIPPI

Volatile Analysis

SDG #1509345

Analyses Performed By:
Eurofins Air Toxics Ltd.
Folsom, California

Report: #24463R
Review Level: Tier III
Project: LA003307.0001.00007

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #1509345 for samples collected in association with the Grenada Manufacturing site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
SG-2(091615)	1509345-01	Air	9/16/2015		X				
SG-1(091615)	1509345-02	Air	9/16/2015		X				
SG-3(091615)	1509345-03	Air	9/16/2015		X				
SG-5(091615)	1509345-04	Air	9/16/2015		X				
SG-6(091615)	1509345-05	Air	9/16/2015		X				
DUP-1(091615)	1509345-06	Air	9/16/2015	SG-5(091615)	X				

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	< -1" Hg

All samples met return canister pressure criteria and were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 24-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SG-2(091615) SG-1(091615) SG-3(091615) SG-5(091615) SG-6(091615) DUP-1(091615)	CCV %D	1,2,4-Trimethylbenzene	-36.7%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01 ¹	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01 ¹	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 30%	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >30% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >30% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

¹ RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketenes, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the established acceptance limits of 70% to 130%.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

Sample locations associated with internal standards exhibiting responses outside of the control limits are presented in the following table.

Sample Locations	Internal Standard	Response
SG-5(091615) SG-6(091615) DUP-1(091615)	Bromochloromethane	< LL but > 40%
	1,4-Difluorobenzene	AC
	Chlorobenzene-d5	

AC Acceptable

The criteria used to evaluate the internal standard responses are presented in the following table. In the case of an internal standard deviation, the compounds quantitated under the deviant internal standard are qualified as documented in the table below.

Control limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No action
	Detect	J
< 40% but > 25%	Non-detect	UJ
	Detect	J
< 25%	Non-detect	R
	Detect	J

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

8. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A laboratory duplicate was not performed on a sample location within this SDG.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result ($\mu\text{g}/\text{m}^3$)	Duplicate Result ($\mu\text{g}/\text{m}^3$)	RPD
SG-5(091615)/ DUP-1(091615)	Benzene	8.3	6.8	AC
	Ethyl Benzene	13	13	
	o-Xylene	24	25	
	1,2,4-Trimethylbenzene	21	20	
	Chloroform	88	88	0.0%
	Toluene	30	30	0.0%
	m,p-Xylene	65	68	4.5%

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15	Reported		Performance Acceptable		Not Required	
	No	Yes	No	Yes		
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)						
Tier II Validation						
Canister return pressure (<-1"Hg)		X		X		
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks					X	
C. Trip blanks					X	
Laboratory Control Sample (LCS)		X		X		
Laboratory Control Sample Duplicate(LCSD)		X		X		
LCS/LCSD Precision (RPD)		X		X		
Field/Lab Duplicate (%D)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content					X	
Tier III Validation						
System performance and column resolution		X		X		
Initial calibration %RSDs		X		X		
Continuing calibration RRFs		X		X		
Continuing calibration %Ds		X	X			
Instrument tune and performance check		X		X		
Ion abundance criteria for each instrument used		X		X		
Internal standard		X	X			
Compound identification and quantitation						
A. Reconstructed ion chromatograms		X		X		
B. Quantitation Reports		X		X		
C. RT of sample compounds within the established RT windows		X		X		
D. Transcription/calculation errors present				X		
E. Reporting limits adjusted to reflect sample dilutions		X		X		

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					

%RSD Percent relative difference
 %R Percent recovery
 RPD Relative percent difference
 %D Percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: October 19, 2015

PEER REVIEW BY: Dennis Capria

DATE: November 4, 2015

CORRECTED SAMPLE ANALYSIS DATA SHEETS AND COCs



Air Toxics

Sample Transportation Notice

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Project Info:

P.O. #

IN000899.2013

Project #

IN000899.2013

Project Name

GREENADA Manufacturing

Turn Around Time:

☐ Normal☐ Rush

specify

Lab Use Only

Pressurized by:

Date:

Pressurization Gas:

N₂

He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum			
						Initial	Final	Receipt	Final (psi)
01A	SG-2 (091615)	31765	9-16-15	0755-0808	TD-15, PROTECT LIST	30	4.5		
02A	SG-1 (091615)	35559	9-16-15	0842-0854	TD-15, PROTECT LIST	30	6.5		
03A	SG-3 (091615)	37382	9-16-15	0933-0947	TD-15, PROTECT LIST	30	4.5		
04A	SG-5 (091615)	112717	9-16-15	1238-1252	TD-15, PROTECT LIST	30	5.0		
05A	SG-6 (091615)	33388	9-16-15	1410-1430	TD-15, PROTECT LIST	30	5.0		
06A	Dwp-1 (091615)	1006	9-16-15	1238-1251	TD-15, PROTECT LIST	30	4.5		
07A	SG-4 (091715)	37397	9-17-15	0627-0653	TD-15, PROTECT LIST	30	5.5		
08A	SG-7 (091715)	112720	9-17-15	0709-0723	TD-15, PROTECT LIST	30	3.5		
09A	SG-8 (091715)	161784	9-17-15	0750-0803	TD-15, PROTECT LIST	30	4.5		

Relinquished by: (signature) Date/Time

Ramona Woodruff 9-18-15/0800

Received by: (signature) Date/Time

Rob Lippencamp 9/18/15 1520

Notes:

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Relinquished by: (signature) Date/Time

Received by: (signature) Date/Time

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	<u>FALIX</u>		<u>NA</u>	<u>Good</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> None	<u>1509345</u>



Air Toxics

Client Sample ID: SG-2 (091615)

Lab ID#: 1509345-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a092522	Date of Collection:	9/16/15 8:08:00 AM
Dil. Factor:	2.28	Date of Analysis:	9/25/15 11:49 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	1.8	3.6	5.6
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected JJ	5.6	Not Detected JJ

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: SG-1 (091615)

Lab ID#: 1509345-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a092523	Date of Collection:	9/16/15 8:54:00 AM
Dil. Factor:	2.48	Date of Analysis:	9/26/15 12:16 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
Toluene	1.2	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
Ethyl Benzene	1.2	1.8	5.4	7.6
m,p-Xylene	1.2	3.5	5.4	15
o-Xylene	1.2	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected UJ	6.1	Not Detected UJ

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: SG-3 (091615)

Lab ID#: 1509345-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a092524	Date of Collection:	9/16/15 9:47:00 AM
Dil. Factor:	2.34	Date of Analysis:	9/26/15 12:57 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	1.9	5.7	9.1
Benzene	1.2	2.9	3.7	9.4
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected UJ	5.8	Not Detected UJ

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	104	70-130

Client Sample ID: SG-5 (091615)

Lab ID#: 1509345-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:		a092525		Date of Collection: 9/16/15 12:52:00 PM	
Dil. Factor:		2.59		Date of Analysis: 9/26/15 01:23 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)		Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	UJ	3.3	Not Detected UJ
1,1-Dichloroethene	1.3	Not Detected	↓	5.1	Not Detected
Methylene Chloride	13	Not Detected		45	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected		5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected		5.1	Not Detected
Chloroform	1.3	18		J	6.3
Benzene	1.3	2.6	J	4.1	8.3 J
1,2-Dichloroethane	1.3	Not Detected	UJ	5.2	Not Detected UJ
Trichloroethene	1.3	Not Detected	UJ	7.0	Not Detected UJ
Toluene	1.3	7.9	J	4.9	30 J
1,1,2-Trichloroethane	1.3	Not Detected	UJ	7.1	Not Detected UJ
Tetrachloroethene	1.3	Not Detected	UJ	8.8	Not Detected UJ
Ethyl Benzene	1.3	3.1	J	5.6	13 J
m,p-Xylene	1.3	15	↓	5.6	65
o-Xylene	1.3	5.5		5.6	24
1,2,4-Trimethylbenzene	1.3	4.3		J0	6.4

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: SG-6 (091615)

Lab ID#: 1509345-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:		a092526		Date of Collection: 9/16/15 2:30:00 PM		
Dil. Factor:		2.63		Date of Analysis: 9/26/15 02:05 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)		Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	1.3	Not Detected	UJ	3.4	Not Detected	UJ
1,1-Dichloroethene	1.3	Not Detected		5.2	Not Detected	
Methylene Chloride	13	Not Detected		46	Not Detected	
trans-1,2-Dichloroethene	1.3	Not Detected		5.2	Not Detected	
cis-1,2-Dichloroethene	1.3	Not Detected		5.2	Not Detected	
Chloroform	1.3	20	J	6.4	97	J
Benzene	1.3	7.1	J	4.2	23	J
1,2-Dichloroethane	1.3	Not Detected	UJ	5.3	Not Detected	UJ
Trichloroethene	1.3	Not Detected	UJ	7.1	Not Detected	UJ
Toluene	1.3	5.5	J	5.0	21	J
1,1,2-Trichloroethane	1.3	Not Detected	UJ	7.2	Not Detected	UJ
Tetrachloroethene	1.3	Not Detected	UJ	8.9	Not Detected	UJ
Ethyl Benzene	1.3	2.0	J	5.7	8.5	J
m,p-Xylene	1.3	11		5.7	48	
o-Xylene	1.3	3.6		5.7	16	
1,2,4-Trimethylbenzene	1.3	3.0	J0	6.5	15	J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: DUP-1 (091615)

Lab ID#: 1509345-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:		a092527		Date of Collection: 9/16/15 12:51:00 PM	
Dil. Factor:		2.48		Date of Analysis: 9/26/15 02:31 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)		Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	UJ	3.2	Not Detected UJ
1,1-Dichloroethene	1.2	Not Detected	↓	4.9	Not Detected
Methylene Chloride	12	Not Detected		43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected		4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected		4.9	Not Detected
Chloroform	1.2	18	J	6.0	88 J
Benzene	1.2	2.1	J	4.0	6.8 J
1,2-Dichloroethane	1.2	Not Detected	UJ	5.0	Not Detected UJ
Trichloroethene	1.2	Not Detected	UJ	6.7	Not Detected UJ
Toluene	1.2	7.9	J	4.7	30 J
1,1,2-Trichloroethane	1.2	Not Detected	UJ	6.8	Not Detected UJ
Tetrachloroethene	1.2	Not Detected	UJ	8.4	Not Detected UJ
Ethyl Benzene	1.2	3.1	J	5.4	13 J
m,p-Xylene	1.2	16	↓	5.4	68
o-Xylene	1.2	5.8		5.4	25
1,2,4-Trimethylbenzene	1.2	4.0 J0		6.1	20 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	113	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	103	70-130